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General Motors Corporation			PEREZ, JULIO R		
Legal Staff, Ma 300 Renaissand	ail Code 482-C23-B21 ce Center	ART UNIT	PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

		Appli	cation No.	Applicant(s)			
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Office Action Commons		09/97	70,626	SCHWINKE, STE	EVEN P.		
	Office Action Summary	Exam	iner	Art Unit			
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Period fo	- The MAILING DATE of this commu r Reply	nication app e ars or	n the cover sheet with th	e correspondence ad	aaress		
THE N - Exten after S - If the - If NO - Failur Any re	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this com period for reply specified above is less than thirty (period for reply is specified above, the maximum s e to reply within the set or extended period for repl eply received by the Office later than three months d patent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In a munication. 30) days, a reply within the tatutory period will apply a will, by statute, cause the	no event, however, may a reply be e statutory minimum of thirty (30) and will expire SIX (6) MONTHS fi e application to become ABANDC	e timely filed days will be considered time om the mailing date of this o NED (35 U.S.C. § 133).	ely. communication.		
Status							
2a)□ 3)□	Responsive to communication(s) fil This action is FINAL . Since this application is in condition closed in accordance with the pract	2b)⊠ This action for allowance exc	is non-final. cept for formal matters,		e merits is		
Dispositi	on of Claims						
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-24</u> is/are pending in the 4a) Of the above claim(s) is/are allowed. Claim(s) <u>1-10 and 13-24</u> is/are rejectaim(s) <u>11,12</u> is/are objected to. Claim(s) are subject to restricted.	are withdrawn fron					
Applicati	on Papers						
10)	The specification is objected to by the drawing(s) filed on is/are Applicant may not request that any objected the Replacement drawing sheet(s) including the oath or declaration is objected to the oath or declaration is objected.	e: a) ☐ accepted of ection to the drawing g the correction is re	g(s) be held in abeyance. equired if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 C			
Priority u	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachmen	t(s)						
1) Notic 2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (nation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date		4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:		ГО-152)		

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DETAILED ACTION

1. Claim Rejections - 35 USC § 102

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5,13-14, 20-22, are rejected under 35 U.S.C. 102(e) as being anticipated by Dent (6553229).

Regarding claim 1, Dent teaches a method of bypassing a blocked voice channel of a mobile phone system comprising: initiating a call request from a mobile phone (col. 10, lines9-11, time delay is minimized by reading the signal; in general, when a mobile terminal is turned on, it executes an initialization procedure with the system); scanning a plurality of control channels of a first carrier (col. 4, lines 62-64; col. 7, lines 54-58, the cellular phone scans a great number of cellular channels to obtain at least one); measuring a signal strength of the control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); requesting service access on a first control channel of the first carrier based on the signal strength (col. 5, lines 13-32, a channel is acquired after determining which one provides the highest signal strength);

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receiving a blocked signal indicating no availability of a voice channel on the first control channel of the first carrier (col. 9, lines 19-32, when no traffic channel availability is detected, then a test is made to determine if other saved signal strengths are present, which exceed the predetermined threshold until another channel is found available, for instance a GSM control channel; thus, continuing to provide feedback of availability of free channels); selecting a second control channel of the first carrier in response to the blocked signal, based on the signal strength (col. 9, lines 25-32, after finding the strongest signal strength, the channel would be utilized); and requesting service access on the second control channel of the first carrier (col. 8, lines 60 –67; col. 9, lines 1-4, the receiver tunes to the first 30 KHz channel with the greatest signal strength; hence, being able to request).

Regarding claim 2, the method wherein the mobile phone system is an analog cellular phone system (col. 5, lines 33-42,the system is related to a multi-mode cellular radiotelephones that include AMPS, an analog cellular system).

Regarding claim 3, the method wherein the analog, cellular-phone system operates within a prescribed band between nominally 824.04 MHz and 893.97 MHz (col. 5, 33-42, AMPS consists of a total of 832 channels and occupies the band (MHz): 824 – 849 (reverse band) and 869 – 894 (forward band)).

Regarding claim 4, the method further comprising: receiving a blocked signal indicating no availability of a voice channel on the second control channel of the first carrier (col. 9, lines 19-32, when no traffic channel availability is detected, then a test is made to determine if other saved signal strengths are present, which exceed the

predetermined threshold until another channel is found available, for instance a GSM control channel; thus, continuing to provide feedback of availability of free channels); selecting a next strongest control channel of the first carrier in response to the blocked signal based on the signal strength (col. 9, lines 25-32, after finding the strongest signal strength, the channel would be utilized); and requesting service access on the next strongest control channel of the first carrier (col. 8, lines 60 –67; col. 9, lines 1-4, the receiver tunes to the first 30 KHz channel with the greatest signal strength; hence, being able to request).

Regarding claim 5, the method wherein the voice channel uses a service selected from a group consisting of voice telephony, short messaging, paging, voice mail, electronic mail, call forwarding, caller identification, call waiting, conference calling, broadcast messages, voice band data, facsimile data, data transmission, modem access, direct access to computer networks, registration, authentication and access to emergency services (it is inherent in a cellular system, such as AMPS systems, for mobile stations to transmit information to base stations via the identified radio control channel, information communicated by the mobile and for the registration process include the Mobile Identification Number (MIN) and the Electronic Serial Number (ESN) of the mobile. This indeed comprises registration process. In terms of GSM, it is inherent for GSM systems to provide voice mail, short message service and facsimile service).

Regarding claim 13, a computer usable medium including a program for bypassing a blocked voice channel of a mobile phone system, comprising (col. 7, lines

54-67; col. 8, lines 1-5, the system presented may take either a software form or a hardware form or both combined, and which contain or be implemented with special purpose hardware-based computer system the can execute specified functions or steps, or a combination of hardware and computer instructions; therefore, fulfilling a computer medium requirement): computer program code for initiating a call request from a mobile phone (col. 10, lines 9-11, time delay is minimized by reading the signal; in general, when a mobile terminal is turned on, it executes an initialization procedure with the system); computer program code for scanning a plurality of control channels of a first carrier (col. 4, lines 62-64; col. 7, lines 54-58, the cellular phone scans a great number of cellular channels to obtain at least one); computer program code for measuring a signal strength of the control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); computer program code for requesting service access on a first control channel of the first carrier based on the signal strength (col. 5, lines 13-32, a channel is acquired after determining which one provides the highest signal strength); computer program code for receiving a blocked signal indicating no availability of a voice channel on the first control channel of the first carrier (col. 9, lines 19-32, when no traffic channel availability is detected, then a test is made to determine if other saved signal strengths are present, which exceed the predetermined threshold until another channel is found available, for instance a GSM control channel; thus, continuing to provide feedback of availability of free channels); computer program code for selecting a second control channel of the first carrier in response to the blocked signal, based on the signal strength (col. 9, lines 13-32, after

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finding the strongest signal strength, the channel would be utilized); and computer program code for requesting service access on the second control channel of the first carrier (col. 8, lines 60 –67; col. 9, lines 1-4, the receiver tunes to the first 30 KHz channel with the greatest signal strength; hence, being able to request).

Regarding claim 14, the computer usable medium (col. 7, lines 54-67; col. 8, lines 1-5, the system presented may take either a software form or a hardware form or both combined, and which contain or be implemented with special purpose hardwarebased computer system the can execute specified functions or steps, or a combination of hardware and computer instructions; therefore, fulfilling a computer medium requirement), further comprising: computer program code for receiving a blocked signal indicating no availability of a voice channel on the second control channel of the first carrier (col. 9, lines 19-32, when no traffic channel availability is detected, then a test is made to determine if other saved signal strengths are present, which exceed the predetermined threshold until another channel is found available, for instance a GSM control channel; thus, continuing to provide feedback of availability of free channels); computer program code for selecting a next strongest control channel of the first carrier in response to the blocked signal based on the signal strength (col. 9, lines 13-32, after finding the strongest signal strength, the channel would be utilized); and computer program code for requesting service access on the next strongest control channel of the first carrier (col. 8, lines 60 –67; col. 9, lines 1-4, the receiver tunes to the first 30 KHz channel with the greatest signal strength; hence, being able to request).

Regarding claim 20, a blocked voice channel bypassing system comprising: means for initiating a call request from a mobile phone (col. 10, lines 9-11, time delay is minimized by reading the signal; in general, when a mobile terminal is turned on, it executes an initialization procedure with the system); means for scanning a plurality of control channels of a first carrier (col. 4, lines 62-64; col. 7, lines 54-58, the cellular phone scans a great number of cellular channels to obtain at least one); means for measuring a signal strength of the control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); means for requesting service access on a first control channel of the first carrier based on the signal strength (col. 5, lines 13-32, a channel is acquired after determining which one provides the highest signal strength); means for receiving a blocked signal indicating no availability of a voice channel on the first control channel of the first carrier (col. 9, lines 19-32, when no traffic channel availability is detected, then a test is made to determine if other saved signal strengths are present, which exceed the predetermined threshold until another channel is found available, for instance a GSM control channel; thus, continuing to provide feedback of availability of free channels); means for selecting a second control channel of the first carrier in response to the blocked signal, based on the signal strength (col. 9, after finding the strongest signal strength, the channel would be utilized); and means for requesting service access on the second control channel of the first carrier (col. 8, lines 60 –67; col. 9, lines 1-4, the receiver tunes to the first 30 KHz channel with the greatest signal strength; hence, being able to request).

Regarding claim 21, the system further comprising: means for receiving a blocked signal indicating no availability of a voice channel on the second control channel of the first carrier (col. 9, lines 19-32, when no traffic channel availability is detected, then a test is made to determine if other saved signal strengths are present, which exceed the predetermined threshold until another channel is found available, for instance a GSM control channel; thus, continuing to provide feedback of availability of free channels); means for selecting a next strongest control channel of the first carrier in response to the blocked signal based on the signal strength (col. 9, 13 –32, after finding the strongest signal strength, the channel would be utilized); and means for requesting service access on the next strongest control channel of the first carrier (col. 8, lines 60 –67; col. 9, lines 1-4, the receiver tunes to the first 30 KHz channel with the greatest signal strength; hence, being able to request).

Regarding claim 22, the system wherein the means for initiating a call request from a mobile phone includes an analog cellular phone system operating within a prescribed band between nominally 824.04 MHz and 893.97 MHz (col. 5, lines 33-42, AMPS consists of a total of 832 channels and occupies the band (MHz): 824 – 849 (reverse band) and 869 – 894 (forward band)).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6-8, 10, 15, 16, 18, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (6553229) in view of Raith et al. (6073005).

Regarding claims 6, 15, 23, Dent teaches all limitations in claims 1, 13, and 20.

Dent does not explicitly disclose increasing priority for emergency services.

However, the preceding limitation is known in the art of mobile communications. Raith et la. teach a mobile providing input for indication of an emergency call to be placed so that it can be categorized as emergency (col. 3, lines 65-67; col. 4, lines 1-3, 24-29; col. 5, lines 6-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Dent by implementing the mobile terminal with a database having all possible emergency call numbers as taught by Raith et al. in order to increase the capabilities for emergency services.

Regarding claim 7, Dent teaches all limitations in claims 1.

Dent does not explicitly disclose priority for emergency services by reducing wait time during the call request.

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However, the preceding limitation is known in the art of mobile communications.

Raith et la. teach a mobile, after the user has requested an emergency call, that takes a few seconds to set up the call to assign and connect to the system via a traffic channel (col. 6, lines 64-67; col. 7, lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Dent by implementing the mobile terminal with identifying possibility means as taught by Raith et al. in order to reduce waiting time during an emergency call.

Regarding claims 8, 10 and 16,18, Dent teaches all limitations in claims 1 and 13.

Dent does not explicitly disclose the call request is automatically initiated in response to an emergency including a geographical location of a mobile vehicle.

However, the preceding limitation is known in the art of mobile communications.

Raith et la. teach the mobile unit wherein a determination is taken after the user has provided input indicating an emergency call to be placed and be categorized as an emergency wherein appropriate action is to be taken (col. 3, lines 65-67; col. 4, lines 1-3), and further includes mechanism for pinpointing position of an emergency caller (col. 4, lines 35-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Dent by implementing the mobile terminal with capabilities to respond to an emergency

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call in conjunction with mechanisms to provide geographical position of emergency calls as taught by Raith et al. in order to respond to such emergencies.

5. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (6553229) and Raith et al. (6073005) in view of Dutta et al. (US20020137489).

Regarding claims 9 and 17, Dent and Raith et al. teach all limitations in claims 8, 16.

Dent and Raith et al. do not explicitly disclose the emergency indicated by the deployment of an air on a mobile vehicle carrying the mobile phone.

However, the preceding limitation is known in the art of mobile communications.

Dutta et al. teach a wireless phone equipped with an emergency notification system installed in a vehicle, which in an event of an emergency, the notification will be activated by the deployment of an air bag (par. 0009; par. 0040).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Dent and Raith et al. by implementing the system with telecommunications circuitry operable to communicate on a wireless carrier system as taught by Dutta et al. because it would provide the system with capabilities to notify an emergency during an air bag deployment.

6. Claims 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (6553229) in view of Dutta et al. (US20020137489).

Regarding claims 19 and 24, Dent teaches all limitations in claims 14 and 20.

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Dent does not explicitly disclose determining whether a vehicle carrying the mobile phone is within a predetermined vehicle speed range.

However, the preceding limitation is known in the art of mobile communications.

Dutta et al. teach a combination of notification system and a wireless phone in conjunction with a deceleration sensor attached to the automobile for detecting changes above a certain range of speed of the vehicle or acceleration of the vehicle (par. 0009; par. 0040).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Dent by implementing the system with telecommunications sensor circuitry operable to communicate on a wireless carrier system as taught by Dutta et al. because it would provide the system with capabilities to more effectively and accurately determine and communicate an emergency situation.

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Allowable Subject Matter

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7. Claims 11, 12, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As per claims 11 and 12, the applicant teaches the method further comprising: determining whether a vehicle carrying the mobile phone is within a predetermined vehicle speed range; and selecting the second control channel of the first carrier when the vehicle is within the predetermined vehicle speed range. These limitations have not been taught or made obvious over the prior art of record.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the art with respect to scanning cellular channels and methods for employing location information related to emergency calls.

US 20030211854 to Mazzara, JR.

Activating a communication system in

mobile vehicles

US Pat. No. 6205334 to Dent

Accelerated scanning cellular channels

US 20020196161 to Gould et al.

Methods for employing location

information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on Monday - Friday, 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on (703) 308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/16/04

PATENT EXAMINER

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